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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,245	09/03/2003	Kang Soo Seo	46500-000599/US	2814
30593 7590 12/09/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
CHOI, MICHAEL P				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
12/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/653,245

Applicant(s)

SEO ET AL.

Examiner

MICHAEL CHOI

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 12-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7 and 12-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 and 12-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (US 6,385,289 B1) in view of Mori et al. (US 2002/0110369 A1).

Regarding Claim 1, Maruyama et al. teaches a computer-readable medium having a data structure for managing reproduction of still images (Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB, comprising:

- a data area storing a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOB containing video packs (Fig. 11) - first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33); and

- a playlist area storing at least one playlist (Fig. 3 – having a program chain in audio & video data area), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on the second still image to provide for at least skipping (Fig. 8 – program chains skipping between various cells, having still images) from reproducing the first still image to reproducing the second still image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information), the playitem indicating an in-point and an out-point of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data; and
- a management area storing at least a first clip information file and a second clip information file (see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the first clip information file including mapping information between a presentation time and a unit of the first clip stream file (Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the second clip information file including mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs; Col. 14, lines 11-15 - each respective

video pack having also a recorded presentation time stamp; Fig. 12), the first and second clip information files corresponding to the first and second clip stream files, respectively (Fig. 11 – first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 2, Maruyama et al. teaches the computer-readable medium of claim 1, wherein the mark information includes a first mark associated with the first still image and a second mark associated with the second still image, the first and second marks providing the presentation information on the first and second still images, respectively (Figs. 11, 27 – C_IDN#1 having a video object unit and C_IDN#2 having a video object unit each containing a navigation pack with presentation control – Figs. 12, 13).

Regarding Claim 3, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating a playitem where the first mark is

placed (Figs. 12, 27 – VOB, 1411 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)), and wherein the second mark includes a second indicator indicating a playitem where the second mark is placed (Figs. 12, 27 – VOB, 1412 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)).

Regarding Claim 4, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating a point in a playitem where the first mark is placed (Figs. 12, 27 – VOB, 1411 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)), and wherein the second mark includes a second indicator indicating a point in a playitem where the second mark is placed (Figs. 12, 27 – VOB, 1412 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)).

Regarding Claim 5, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a type indicator indicating a type of the first mark, and the second mark includes a type indicator indicating a type of the second mark (Col. 14, lines 38+ - containing a stream ID for both pack and system headers).

Regarding Claim 6, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the mark information indicates a number of marks in the mark information (Fig. 27 – VOB containing various sector numbers for each pack).

Regarding Claim 7, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark points to the first still image and the second mark points to the second

still image (Fig. 12 – wherein a first pack and system header associates with the subsequent video packs, each have a still picture for the first mark and second pack and system header associates with the subsequent video packs, 88, also having a still picture for the second mark).

Regarding Claim 12, Maruyama et al. teaches a method of reproducing a data structure for managing reproduction of still images recorded on the computer-readable medium (Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB, comprising:

- reproducing a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOB containing video packs (Fig. 11) - first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33);
- reproducing at least one playlist file, the playlist including mark information (Fig. 8 – having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on first and second still images to provide for at least skipping (Fig. 8 – program chains skipping between various cells, having still images) from reproducing the first still image to reproducing the second still image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB; Col. 14, lines 11-15 - each respective video pack having also a

recorded presentation time stamp; Fig. 12), the playitem indicating an in-point and an out-point of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data; and

- reproducing at least a first clip information file and a second clip information file, the first clip information file including mapping information between a presentation time and a unit of the first clip stream file, and the second clip information file including mapping information between a presentation time and a unit of the second clip stream file, the first and second clip information files corresponding to the first and second clip stream files, respectively.
- a management area storing at least a first and second clip information file (see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 – first VOBUs having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBUs and first image of first video pack of secondary VOBUs to be image #2; Col. 12, lines 26-33), respectively, the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file for the first still image, the second information file including a mapping information between a presentation time and a unit of the second clip stream file for the second still image (Col. 12, lines 26-33 – each VOBUs having playback time of

group of pictures, images respective of VOBUs; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 13, Maruyama et al. teaches an apparatus for reproducing a data structure for managing reproduction of still images recorded on a computer-readable medium, comprising:

- a pick up configured to reproduce data recorded on the computer-readable medium (Fig. 19, 32); and
- a controller configured to control the pick up to reproduce a first clip stream file and a second clip file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOBUs containing video packs (Fig. 11) - first VOBUs having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBUs and first image of first video pack of secondary VOBUs to be image #2; Col. 12, lines 26-33); and

- the controller configured to control the pick up (Fig. 19, 36) to reproduce at least one playlist file (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain) and at least one playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on first and second still images (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 – program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-point the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data, (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and
- the controller configured to control the pick up to reproduce a first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 – first VOBUs having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBUs and first image of first video pack of secondary VOBUs to be image #2; Col. 12, lines 26-33), the first clip information file

including a mapping information between a presentation time and a unit of the first clip stream file, the second information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB; Col. 14, lines 11-15 – each respective video pack having also a recorded presentation time stamp; Fig. 12).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 14, Maruyama et al. teaches a method of recording a data structure for managing reproduction of still images on a computer-readable medium, comprising:

- recording a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOB containing video packs (Fig. 11) – first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be

image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33);

- recording (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at least one playlist file, the playlist including mark information (Fig. 8 – having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem, (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on the second still image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 – program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-point of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain);
- the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and
- recording at least a first clip information file and a second information file (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area), the first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 – first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of

secondary VOBUs to be image #2; Col. 12, lines 26-33), the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file, the second information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs; Col. 14, lines 11-15 – each respective video pack having also a recorded presentation time stamp; Fig. 12).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 15, Maruyama et al. teaches an apparatus for recording a data structure for managing reproduction still images on a computer-readable medium (Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs), comprising:

- a pick up configured to record data on the computer-readable medium (Fig. 19, 32); and
- a controller configured to control the pick up to record a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the

still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOBUs containing video packs (Fig. 11) - first VOBUs having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBUs and first image of first video pack of secondary VOBUs to be image #2; Col. 12, lines 26-33); and

- the controller configured to control the pick up to record (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at least one playlist file (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBU's 1 and 2, 85) and playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain), the mark information providing presentation information on second still image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOBUs having playback time of group of pictures, images respective of VOBUs; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 – program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-point of the first clip stream file, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and

- the controller configured to control the pick up to record a first clip information file (Fig. 11 – first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33) including a mapping information between a presentation time and a unit of the first clip stream file and the second clip information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOB having playback time of group of pictures, images respective of VOB; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the first and the second clip information file corresponding to the first and the second clip stream files (Fig. 11 – first VOB having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOB and first image of first video pack of secondary VOB to be image #2; Col. 12, lines 26-33), respectively.

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Claims 16, 22, 28 and 34 are rejected under the same grounds as claim 2.

Claims 17, 23, 29 and 35 are rejected under the same grounds as claim 3.

Claims 18, 24, 30 and 36 are rejected under the same grounds as claim 4.

Claims 19, 25, 31 and 37 are rejected under the same grounds as claim 5.

Claims 20, 26, 32 and 38 are rejected under the same grounds as claim 6.

Claims 21, 27, 33 and 39 are rejected under the same grounds as claim 7.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHAEL CHOI** whose telephone number is (571) 272-9594. The examiner can normally be reached on **M-F (9am - 5:30pm)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Choi
Examiner
Art Unit 2621

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621